Chapter 7

Specific Shoreline Development Policies and Regulations

The following policies and regulations apply to specific types of development that may be proposed along the shorelines of Sumner. A proposal can consist of one or more of these developments. For example, a proposal to mine river gravel would have to be consistent with the policies and regulations pertaining to industrial development and mining. If the proposed project includes other specific developments such as a dock or a road, then these aspects of the project must also be reviewed for consistency with the applicable policies and regulations listed below. In addition, all specific shoreline developments must be consistent with the Shoreline Environmental designations of Chapter 4, the Goals and Objectives of Chapter 5, and the General Development Policies and Regulations of Chapter 6.

This Master Program provides specific policies and regulations for the following types of specific shoreline development:

1. Agriculture
2. Boating Facilities
    a. Boat Launch Ramps
    b. Docks
    c. Dry Boat Storage
    d. Marinas
3. Clearing and Grading
4. Commercial Development
5. Dredging and Disposal of Dredge Spoils
6. Industrial Development
7. Instream Structures
8. Landfill
9. Mining
10. Parking
11. Recreational Facilities

12. Residential Development
13. Shoreline Modification
    a. Bulkheads
    b. Dikes and Levees
    c. Revetments
14. Signs
15. Transportation
16. Utilities

1. AGRICULTURE

Definition

Agriculture refers to all methods of livestock, crop, vegetation, and soil management. These include, but are not necessarily limited to, the related activities of tilling, fertilizer application, soil preparation and maintenance, harvesting, and the control of weeds, plant diseases, and insect pests. Also included are animal husbandry practices associated with the feeding, housing, maintenance, and marketing of animals such as beef cattle, milk cows, breeding stock, horses, and poultry. Facilities contained within this category include, but are not limited to, storage, feedlots, fences, and ditches; agricultural processing industries are excluded. Uses and activities associated with agriculture that are identified as separate use activities, such as *Industrial Development* and *Flood Hazard Management* (in the *Specific Shoreline Uses* section), are subject to the regulations established for those uses in addition to the standards established in this section.

Note: The Shoreline Management Act exempts the construction and practices normal or necessary for farming, irrigation, and ranching activities from the substantial development permit requirement. This exemption would apply to service roads, utilities, and the construction and maintenance of irrigation structures such as head gates, pumping facilities, and irrigation channels. Also exempt is the operation and maintenance of any system of dikes, ditches, drains, or other facilities that were in existence prior to September 8, 1975, and that were created, developed, or utilized primarily as a part of an agricultural drainage or diking system.

The exemption for agricultural uses does not apply to a feedlot of any size, processing plants, other activities of a commercial nature, or the alteration of the contour of the land by leveling or filling other than that which results from normal cultivation (see RCW 90.58.030). A feedlot is defined as an enclosure or facility used or capable of being used for feeding livestock hay, grain, silage or other livestock feed. A feedlot is not land used for growing crops or vegetation for livestock feeding or grazing and does not include normal livestock wintering operations.

Although specific agricultural activities and structures are exempt from the Substantial Development Permit requirement, they must comply with all applicable prohibitions, regulations, and development standards contained within this Master Program. If necessary, a Conditional Use and/or Variance Permit must be obtained.

Agriculture Policies

A vegetative buffer should be maintained between housing, livestock, and water bodies or wetlands in order to reduce harmful bank erosion and resulting sedimentation, enhance water quality by slowing and filtering runoff, and maintain habitat for fish and wildlife.

1. A vegetative buffer of native plants should be maintained between agricultural lands and water bodies or wetlands in order to protect water quality and to maintain habitat for fish and wildlife.

2. Animal feeding operations, retention and storage ponds, feedlot waste and manure storage should be located out of the shoreline jurisdiction and constructed to prevent contamination of water bodies and degradation of the shoreline environment.

3. Appropriate farm and soil management techniques should be utilized to prevent fertilizers, herbicides, and pesticides from contaminating water bodies and wetlands and having a harmful effect on valuable plant, fish and animal life.

4. Public access to the shoreline should be encouraged where it does not conflict with agricultural activities.

Agriculture Regulations

1. A buffer of permanent native vegetation shall be established and maintained between areas used for cultivation or intensive grazing and adjacent water bodies and wetlands. The plant composition and width of the buffer shall be based on the site conditions, including type of vegetation, soil types, drainage patterns, and slope. However, the buffer shall include the riverbank and shall not be less than twenty-five (25) feet wide as measured landward and perpendicular to the natural floodway boundary. The buffer shall be of sufficient width to retard runoff, reduce sedimentation, and provide riparian habitat.

2. Riverbanks and water bodies shall be protected from damage due to concentration and overgrazing of livestock by providing the following when warranted:

    - Ample supplies of clean water in tanks on dry land for stock watering; and,

    - Fencing or other grazing controls to prevent overgrazing and damage to buffer vegetation.

3. Adequate provision shall be made during the application of agricultural chemicals to prevent contamination of water bodies, wetlands, or aquifers.

4. The following agricultural developments and activities are **prohibited** within the shoreline jurisdiction:

   - Animal feedlot operations, including the collection of feedlot wastes, stockpiling of manure solids, and storage of noxious chemicals.
   - Aerial spraying of chemical pesticides or herbicides over water bodies, wetlands, or within a floodway, or within two hundred (200) feet of the ordinary high water mark, unless specifically permitted under the Washington Departments of Agriculture or Public Health
   - The disposal of inorganic farm wastes, chemicals, fertilizers, and associated containers and equipment.
   - Any agricultural activity waterward of the ordinary high water mark.
   - Manure lagoons.
   - Manure spreading on agricultural fields.

Agriculture Environment Specific Regulation

Urban Conservancy, Shoreline Residential, and **Urban:** Agriculture activity such as tilling of the land or animal grazing is a permitted use. However, all agricultural structures must respect the appropriate shoreline environment setback, established in Chapter 4. Agriculture activity waterward of the ordinary high water mark is prohibited.

2. BOATING FACILITIES

Definition

Boating facilities include marinas, boat launch ramps (public and private), wet and dry boat storage, related sales and service for pleasure and commercial watercraft, and docks (piers).

Note: Docks for private, noncommercial pleasure craft and common to a single family residence, and costing less than ten thousand dollars ($10,000) are exempt from the requirement for a Shoreline Substantial Development Permit. However, all docks must be constructed and operated consistent with the Shoreline Management Act and the provisions of this Master Program.[1]

[1] RCW 90.58.030(3)(e)(7) further requires that, if subsequent construction with a fair market value of more than $2,500 occurs within five years of completion of the prior construction, the subsequent construction shall be considered a substantial development and be subject to review.

Boating Facilities Policies

1. Boating facilities can have a significant impact on riverine habitat and river mechanics; for this reason, the impacts of boat facilities should be reviewed thoroughly before boating facilities are permitted in the Sumner shoreline jurisdiction.

2. Public and community boating facilities are preferred over individual private facilities.

3. New commercial or industrial boating facilities may be permitted in the Sumner shoreline. If allowed, such facilities should be designed to accommodate public access and enjoyment of the shoreline location. Depending on the scale of the facility, public access should include walkways, viewpoints, restroom facilities, and other recreational uses.

4. Docks may be permitted in the Sumner shoreline. Docks should be designed to cause minimum interference with navigable waters and the public's use of the water and the shoreline.

5. Dry boat storage should not be considered a water-oriented use. Only boat hoists, boat launch ramps, and access routes associated with a dry boat storage facility should be considered a water-oriented use.

6. Use of natural nonreflective materials in dock construction should be encouraged. When plastics and other non-biodegradable materials are used, precautions should be taken to ensure their containment.

Boating Facilities Regulations

General

1. Boating facilities, as defined in this section, shall require a conditional use permit, unless otherwise specified.

2. The City of Sumner shall require the following information in its review and evaluation of boating facility proposals:

a) A description of the existing natural shoreline features and uses;

b) A description of the geohydraulic processes at the site including, accretion/erosion characteristics, flood levels, and surface drainage;

c) A description of biological resources and habitats in the upland and aquatic environments;

d) An estimate of the area of surface water to be appropriated;

e) A description of any shore defense works or shoreline stabilization and flood protection proposed as part of the project; and

f) Other information determined by the Administrator to be relevant to the protection of the shoreline habitat and any endangered species present.

3. Boating facilities may be permitted only if:

   a) It can be demonstrated that the facility will not adversely impact critical fish or wildlife habitat areas; associated wetlands; or properly functioning conditions for proposed, threatened or endangered species; and

   b) Adequate mitigation measures ensure that there is no net loss of the functions or values of riparian habitat as a result of the facility.

Boat Launch Ramps

1. Boat launch ramps shall locate on stable shorelines where water depths are adequate to eliminate or minimize the need for channel maintenance activities.

2. Boat launch ramps may be permitted on accretion shoreforms, provided any necessary grading is not harmful to affected resources and any accessory facilities are located out of the floodway.

3. Where boat ramps are permitted, parking and shuttle areas shall not be located on scarce accretion shoreforms, which have high value for general shore recreation.

4. Boat launch ramps may be permitted on stable non-erosional banks where the need for shore stabilization structures is minimized.

5. Boat launch ramps may be permitted for individual residences where the slope of the riverbank does not exceed twenty-five percent (25%) or where substantial cutting, grading, filling, or defense works are not necessary.

6. Ramp structures shall be placed near flush with the foreshore slope to minimize the interruption of geohydraulic processes.

7. Boat launch sites that are open to the public shall have adequate restroom facilities operated and maintained in compliance with Tacoma-Pierce County Health Department regulations.

Docks

1. Docks shall not significantly interfere with use of navigable waters.

2. Docks shall not locate where the river channel is subject to change in direction or alignment.

3. Docks shall be designed to minimize interference with upstream or downstream passage of salmonids.

4. All docks shall be constructed and maintained in a safe and sound condition. Abandoned or unsafe docks shall be removed or repaired promptly by the owner. Where any such structure constitutes a hazard to the public, the City may, following adequate notice to the owner, remove the structure if the

owner fails to so within ninety (90) days of notice. The City may impose a lien on the related shoreline property in an amount equal to the cost of the abatement.

5. Pilings must be structurally sound and cured prior to placement in the river.

6. Docks shall utilize the minimum number of pilings necessary, favoring large spans on fewer pilings over smaller spans on more pilings.

7. No over-water field applications of preservative treatment or other chemical compounds shall be permitted. Painting of the dock shall be permitted provided brush application is used and best management practices are followed to prevent paint from coming in contact with the river.

8. Bulk storage for gasoline, oil, and other petroleum products is prohibited on docks. Bulk storage means non-portable storage in fixed tanks.

Dry Boat Storage

1. Dry boat storage shall not be considered a water-oriented use and must respect the appropriate shoreline environment setback.

2. Only water-dependent aspects of dry-boat storage, such as docks, boat hoists and boat launch ramps may be permitted within shoreline environment setbacks.

3. Boat launch ramps and docks associated with dry boat storage shall be consistent with applicable requirements in this section.

Marinas

1. Marinas are a prohibited use along the White (Stuck) and Puyallup Rivers.

Boating Facilities Environment Specific Regulation

Urban Conservancy, Shoreline Residential, and **Urban**: Except for marinas, boating facilities may be permitted as a conditional use. Only water-dependent aspects of dry-boat storage may be permitted as a conditional use.

3. CLEARING AND GRADING

Definition

Clearing and grading is the activity associated with developing property for commercial, industrial, residential, or public use. Clearing involves the removal of vegetation or topsoil. Grading involves the physical alteration of the earth's surface by either excavation or filling.

Clearing and Grading Policies

1. Clearing and grading activities should only be allowed in association with an allowed (permitted) shoreline development.

2. Clearing and grading activities should be limited to the minimum necessary to accommodate the shoreline development or a landscape scheme developed in conjunction with the shoreline development.

3. Clearing and grading should not be permitted within shoreline environment setbacks, unless fish and wildlife habitat will not be degraded.

4. Best management practices should be used during clearing and grading to control erosion.

5. For extensive clearing and grading proposals, a plan addressing species removal, revegetation, irrigation, erosion and sedimentation control, and other methods of riparian corridor protection should be required.

Clearing and Grading Regulation

General

1. Clearing and grading activities shall only be allowed in association with a permitted shoreline development.

2. All clearing and grading activities shall be limited to the minimum necessary for the intended development, including any clearing and grading approved as part of a landscape plan. Surfaces cleared of vegetation and not developed must be replanted as soon as possible. Within two (2) years the vegetative cover must be reestablished.

3. Clearing and grading within shoreline environment setbacks shall comply with the special requirements for **Riparian Management Zones** (below).

4. Outside of riparian management zones, normal non-destructive pruning and trimming of vegetation for maintenance purposes shall be permitted.

5. Clearing invasive non-native shoreline vegetation listed on the Pierce County Noxious Weed List is permitted in shoreline locations, provided hand held equipment is used and native vegetation is promptly reestablished in the disturbed area.

6. All shoreline development and activity shall use effective measures to minimize increases in surface water run off that may result from clearing and grading activity. The applicant must include in the proposal the methods that will be used to control, treat, and release runoff so that receiving water quality and shore properties and features shall not be adversely affected. Such measures may include but are not limited to dikes, berms, catch basins or settling ponds, installation and maintenance of oil/water separators, grassy swales interceptor drains, and landscaped buffers.

7. Stabilization of exposed erosional surfaces along shorelines shall, whenever feasible, utilize soil bioengineering techniques.

Riparian Management Zone Regulations

A riparian management zone is the area within the shoreline environment setback. These setbacks are measured landward from the floodway and are as follows (see also *Chapter 4: Shoreline Environments)*:

Shoreline Environment	Width
Shoreline Residential	One hundred (100) feet
Urban Conservancy	Two hundred (200) feet

The purposes for maintaining a riparian management zone are to preserve the natural character of the shoreline, to protect the functions and values of critical areas, to conserve properly functioning conditions, and to enhance the recreational experience for the public using the river and adjacent lands. *Chapter 3: Shorelines of Statewide Significance,* describes these purposes in more detail and establishes the riparian management zone as a primary means of complying with the priorities for shorelines of statewide significance.

In order to maintain riparian corridors along both sides of the White (Stuck) and Puyallup Rivers, the City of Sumner shall regulate the cutting, trimming, and clearing of vegetation within shoreline environment setbacks, as follows:

1. Topping of trees and trimming of vegetation may be permitted within the riparian management zone, provided:

   a) This provision is not interpreted to allow clearing of vegetation, and

   b) The Administrator determines, after consultation with the Washington Department of Fish and Wildlife, that such topping and trimming is not detrimental to the riparian functions and values.

2. Clearing within the riparian management zone is regulated as follows:

   a) For water-oriented uses, clearing shall be limited to the minimum necessary for the successful operation of the use, subject to the additional clearing and grading requirements of this section and the provisions of this Master Program.

   b) Clearing for agricultural purposes, such as cultivation or intensive grazing shall be prohibited along riverbanks. Furthermore, a buffer of permanent vegetation must be established and maintained between areas used for cultivation or grazing and the river. The width of the buffer shall be determined by the Administrator on a site-by-site basis, based on information provided by the applicant, but shall include the riverbank and shall not be less than twenty-five (25) feet wide as measured landward and perpendicular to the natural floodway boundary. (See *Chapter 7-Agriculture Regulations*). All agricultural structures must meet the shoreline environment setback.

   c) For nonwater-oriented uses (other than agricultural), clearing is permitted for view corridors and/or river access provided:

- No more than twenty-five (25%) percent of the shoreline is cleared, measured parallel to the river on any legally created shoreline parcel, and provided further,

- No view corridor or river access exceeds fifty (50) feet, measured parallel to the river on any legally created shoreline parcel.

d) Clearing for landscape purposes may be permitted upon approval of a detailed landscape plan. The landscape plan shall include:

- A map illustrating the distribution of existing plant communities in the area proposed for landscaping. The map must be accompanied by a description of the vegetative condition of the site, including plant species, plant density, fish and wildlife habitat values, and any natural or man-made disturbances.

- A description of the shade conditions created by existing vegetation. This description shall include an inventory of vegetation overhanging the river as well as a determination of how much shade is created by standing trees, during midday at midsummer. All trees that shade the river during midday at midsummer shall be retained.

- A detailed landscape map indicating which areas will be preserved and which will be cleared. This map must identify trees that will be removed or selectively thinned.

- Drawings illustrating the proposed landscape scheme, including the type, distribution, and density of plants. Any pathways or nonvegetated portions should be noted.

- A description of any vegetation introduced for the purposes of fish and wildlife habitat. Loss of wildlife habitat shall be mitigated on-site. If on-site mitigation habitat is not possible, off-site mitigation shall be permitted at a replacement ratio of one-to-one-and-a-quarter (1:1.25) (habitat lost to habitat replaced).

- A letter from the Washington Department of Fish and Wildlife acknowledging review of the proposed landscape plan and finding that fish and wildlife habitat will not be degraded.

e) In all cases where clearing may be approved, exposed soils shall be immediately developed or revegetated to prevent erosion. Unless it would interfere with river access or the successful operation of a water oriented use, cleared land within twenty-five (25) feet of the floodway shall be revegetated with plants that benefit fish and wildlife habitat, such as low mass shrubbery, overhanging bushes, and tall grasses.

f) In all cases where clearing is followed by revegetation, native plants shall be preferred.[2]

g) In all cases where revegetation involves the placement of groundcover, shrubs, or trees the following regulations shall apply:

- At the time of planting, groundcover must be planted such that complete coverage is attained within one growing season.
- At the time of planting, shrubs must be eighteen (18) inches high. Shrubs should be planted such that within two years the shrubs will cover at least sixty percent (60%) of the area that would be covered when the shrubs have attained a mature size.
- At the time of planting, deciduous trees must be at least two (2) inches in caliper as measured one (1) foot above grade, and coniferous trees must be at least five (5) feet in height.
- The applicant shall install and implement an irrigation system to insure survival of vegetation planted in compliance with the riparian management provisions of this Master Program.
- For a period of two (2) years after initial planting, the applicant shall replace any unhealthy or dead vegetation planted as part of an approved landscape plan.

h) The City shall determine whether a performance bond should be required as a condition of permit approval, to ensure compliance with the riparian management zone regulations.

Clearing and Grading Environment Specific Regulation

Shoreline Residential and **Urban**: Clearing and grading shall be a permitted activity when associated with a development that is consistent with the provisions of this Master Program.

Urban Conservancy: Clearing and grading may be permitted as a conditional use when associated with a development that is consistent with the provisions of this Master Program.

4. COMMERCIAL DEVELOPMENT

Definition

Commercial development is a use that is involved in wholesale, retail, service, and business trade.

[2] A list of native plants that are adapted to riparian conditions will be provided by the City of Sumner, in consultation with appropriate local and state agencies. The Washington Department of Fish and Wildlife can also provide a list of species that benefit riparian habitat areas.

Commercial Development Policies

1. Priority of any commercial development should be given to uses that provide the greatest opportunity for the public to enjoy the shoreline in Sumner. This includes restaurants that provide a view of the river to customers; motels and hotels that provide walking areas for the public along the shoreline; office buildings; and retail sales buildings that have a riverfront theme with public access to the waterfront.

2. Over-the-water commercial development should be prohibited.

3. New commercial development on shorelines should be encouraged to locate in areas with existing commercial uses.

4. Commercial development should be required to provide physical or visual access to the shoreline or other opportunities for the public to enjoy shorelines of statewide significance.

5. Site plans for commercial developments should include multiple use concepts such as open space and recreation.

6. Commercial development in the shoreline jurisdiction should include landscaping to enhance the shoreline area.

Commercial Regulations

1. New commercial developments shall be located in those areas where land is planned and zoned for their use.

2. Over-water construction of commercial uses is prohibited, provided this prohibition does not preclude the development of docks, boat launch ramps, or other river access facilities that are consistent with the intent of this master program and necessary for the operation of an associated commercial use.

3. All commercial development within shoreline jurisdiction shall provide for public visual and physical access to the shoreline. Where on-site public access is appropriate, commercial development shall dedicate, improve, and provide maintenance for a pedestrian easement that provides area sufficient to ensure usable access to and along the shoreline for the general public. Public access easements shall be a minimum of twenty-five (25) feet in width and shall comply with the public access standards contained in this Master Program (see *Chapter 6: General Shoreline Development Policies and Use Regulations: Public Access*).

4. Off-site public access to the Sumner shoreline shall be required if on-site public access would pose an unacceptable risk to the public health, safety, and welfare. Off-site public access must meet the same standards and requirements as on-site public access.[3]

[3] NOTE: Offsite public access could be provided either through a payment in lieu agreement with the City or through the purchase of land or an easement at a location appropriate to provide the access deemed necessary.

5. All commercial loading and service areas shall be located on the upland side of the commercial activity or provisions shall be made to screen the loading and service areas from the shoreline.

6. Commercial development shall be designed and maintained in a neat and orderly manner, consistent with the character and features of the surrounding area.

Commercial Environment Specific Regulations

Shoreline Residential and **Urban**: Commercial developments are permitted uses, unless otherwise stated in this Master Program. Over-the-water commercial development is prohibited.

Urban Conservancy: Water-oriented commercial development may be permitted as a conditional use. Nonwater-oriented, commercial development is prohibited. Over-the-water commercial development is prohibited.

5. DREDGING AND DISPOSAL OF DREDGE SPOILS

Definition

Dredging is the removal or displacement of earth such as gravel, sand, mud, or silt from lands covered by water. Lands covered by water include stream beds and wetlands. Dredging is normally done for specific purposes or uses such as maintaining navigation channels, constructing bridge footings, or laying submarine pipelines or cable.

Dredge spoil is the material removed by dredging. Dredge spoil disposal is the depositing of dredged materials on land or into water bodies for the purpose of either creating new or additional lands or for disposing of the material in an acceptable manner.

Dredging and Dredge Spoil Policies

1. Dredging of bottom materials for the primary purpose of obtaining fill material is strongly discouraged.

2. Dredging operations should be planned and conducted to minimize interference with navigation; avoid creating adverse impacts on other shoreline uses, properties, and values; and avoid adverse impacts to habitat areas and fish species.

3. Dredge spoil disposal in water bodies should be discouraged except for habitat improvement.

4. Dredge spoil disposal on land should occur in areas where environmental impacts will not be significant.

Dredging and Dredge Spoil Regulations

1. Applications for shoreline dredging and dredge spoil disposal shall provide, at a minimum, the following information:

    a) Physical, chemical, and biological analysis of material to be dredged, including material composition, particle size distribution, volume and amount, organic content, source of material, volatile solids, chemical oxygen demand (COD), grease and oil, oxygen and heavy metals, nutrients, sulfides and biological organisms, both permanent and migratory/transitory.

    b) Dredging technique, schedule, frequency, hours of operation, and procedures.

    c) Method of dredge spoil disposal, including the location, size, capacity and physical characteristics of the soil disposal area, transportation method and routes, hours of operation, and schedule.

    d) Location and stability of bedlands adjacent to proposed dredging area.

    e) Hydraulic analyses, including current flows, direction, and projected impacts. Hydraulic modeling studies are required for large scale, extensive dredging projects.

    f) Assessment of water quality impacts.

    g) Biological assessment including migratory, seasonal, and spawning factors.

2. Dredging and dredge spoil disposal shall be permitted only where it is demonstrated that the proposed actions will not:

    a) Result in significant damage to water quality, fish, and other essential biological elements, and will not adversely alter natural drainage and circulation patterns, currents, river flows, or significantly reduce floodwater capacities or significantly impact properly functioning conditions for proposed, threatened or endangered species or the functions and values of critical areas..

3. Proposals for dredging and dredge spoil disposal shall include all feasible mitigating measures to protect habitats and to minimize adverse impacts such as turbidity, release of nutrients, heavy metals, sulfides, organic materials, or toxic substances, depletion of oxygen, disruption of food chains, loss of benthic productivity, and disturbance of fish runs and important localized biological communities.

4. Dredging and dredge spoil disposal shall not occur in wetlands, EXCEPT as authorized by conditional use permit and provided the wetland alteration policies and regulations in Chapter 6 are followed. Dredging and dredge spoil disposal in wetlands can occur for the purposes of enhancing valuable wetland functions.

5. Dredging within the floodway shall be permitted only:

   - For navigational purposes;
   - In conjunction with a water-dependent use;
   - As part of an approved habitat improvement project;
   - To improve flood control, water flow or water quality, provided that all dredged material shall be contained and managed so as to prevent it from reentering the water;
   - For mining and/or mineral extraction;
   - In conjunction with a bridge, utility, navigational structure, or instream structure, for which there is a documented public need and where other feasible sites or routes do not exist.

6. When dredging is permitted, the dredging shall be the minimum necessary to accommodate the proposed use.

7. Dredging shall utilize techniques that cause minimum dispersal and broadcast of bottom material; hydraulic dredging shall be used wherever feasible in preference to agitation dredging.

8. Dredged spoil material may be disposed at approved upland sites. If these upland sites are dry lands and fall within shoreline jurisdiction, the disposal of dredge spoils shall be considered grading and must be consistent with all applicable provisions of this Master Program. If these upland sites are associated wetlands, then the disposal of dredge spoils shall be considered "Landfill" and must be consistent with all applicable provisions of this Master Program.

9. Depositing dredge spoils within the following shall be allowed only by conditional use permit for one of the following reasons:

   - For wildlife habitat improvements;
   - To correct problems of material distribution that are adversely affecting fish resources; or
   - When land disposal alternatives are more detrimental to shoreline resources than depositing it in water areas.

10. If suitable alternatives for land disposal are not available or are infeasible, water disposal sites shall be identified consistent with the following criteria:

    - Disposal will not interfere with geohydraulic processes;
    - The dredge spoil has been analyzed by qualified personnel and found to be minimally or nonpolluting;

- Aquatic life will not be adversely affected; and
- The site and method of disposal meets all requirements of applicable regulatory agencies.

11. The City may impose reasonable limitations on dredge disposal operating periods and hours and may require provision for buffer strips at land disposal sites.

Dredging Environment Specific Regulations

Shoreline Residential and **Urban**: By definition, dredging is the removal of earth from lands covered by water, therefore dredging cannot occur on lands *not* covered by water. Dredging within the floodway shall be permitted if consistent the provisions of this master program. Dredging in wetlands shall require a conditional use permit.

Urban Conservancy: Dredging within wetlands or the floodway shall be permitted only as a conditional use.

Dredge Spoil Disposal Environment Specific Regulations

Shoreline Residential, Urban and **Urban Conservancy**: Dredge spoil disposal on dry upland sites shall be considered "grading" and may be permitted when associated with a permitted development that is consistent with the provisions of this Master Program. (Dredge spoil disposal on upland sites that are associated wetlands, shall be considered "Landfill" and must be consistent with all applicable provisions of this Master Program.)

Dredge spoil disposal within the floodway may be permitted as a conditional use only for specific developments expressly stated in this Master Program.

6. INDUSTRIAL DEVELOPMENT

Definition

Industrial developments are facilities for processing, manufacturing, and storage of finished or semi-finished goods.

Industrial Policies

1. Shorelines particularly suitable for water-dependent and water-related industrial development should be identified and reserved for these uses.

2. New industrial development should be required to provide physical and visual access to shorelines whenever possible, provided such access does not interfere with operations or hazards to life and property.

3. Joint use of storage, parking, and other accessory facilities among private or public entities should be strongly encouraged or required in shoreline industrial areas.

4. Industrial development should not be located on sensitive and ecologically valuable shorelines such as natural accretion shoreforms or estuaries, wildlife habitat areas, wetlands, nor on shores inherently hazardous for such development, such as flood-prone or erosion-prone areas and steep or unstable slopes.

Industrial Regulations

1. Only water dependent and water-related industries shall be permitted within shoreline environment setbacks established by this Master Program (see *Chapter 4: Shoreline Environment*).

2. Over-the-water construction of industrial uses is prohibited, provided this prohibition does not preclude the development of instream structures or boating facilities that are necessary for the operation of an associated industrial use and are consistent with the provisions of this Master Program.

3. Where on-site public access is appropriate, industrial development shall dedicate, improve, and provide maintenance for a pedestrian easement that provides area sufficient to ensure usable access to and along the shoreline for the general public. Public access easements shall be a minimum of twenty-five (25) feet in width and shall comply with the public access standards contained in this Master Program (see *Chapter 6 - Public Access*).

4. Off-site public access to the Sumner shoreline shall be required if on-site public access would pose an unacceptable risk to the public health, safety, and welfare. Off-site public access must meet the same standards and requirements as on-site public access.

5. Accessory industrial development that does not require a shoreline location shall be located upland of the water-dependent or water-related portions of the development and setback from the floodway as set forth in Chapter 4. Accessory development includes, but is not limited to, parking, warehousing, open-air storage, waste storage and treatment, storm runoff control facilities, utilities, and land transportation corridors.

6. Sewage treatment and water reclamation may only be permitted by conditional use and shall be located where they do not interfere with and are compatible with recreational, residential, or other public uses of the water and shorelines.

7. Storage and/or disposal of industrial wastes is prohibited within shoreline jurisdiction, provided that wastewater treatment system may be allowed if alternate inland areas are unavailable.

8. All new or expanded industrial development shall be set back and buffered from adjacent shoreline properties that are used for nonindustrial purposes. Buffers shall be of adequate width and height, to protect adjacent land uses from visual or noise intrusion. New or expanded industrial development shall be set back from the shoreline (See *Chapter 4: Shoreline Environments*) except those water-dependent portions of the development that require direct access to the water.

9. Buffers shall not be used for storage of industrial equipment or materials, or for waste disposal. Buffers may be used for outdoor recreation if consistent with public access provisions.

10. Display and other exterior lighting shall be designed, shielded, and operated to minimize glare, to avoid illuminating nearby properties, and to prevent hazards for public traffic.

11. Unpaved storage areas underlain by permeable soils shall have at least a 4-foot separation (confirm this is adequate) between the ground surface and the highest seasonal water table.

12. Berms, dikes, grassy swales, vegetated buffers, retention ponds, or other means shall be used to ensure that surface runoff is collected and discharged from the storage area at one point, if possible. It shall be demonstrated that water quality standards will not be violated by such runoff under any conditions of flow, leaving the site and entering into nearby watercourses.

Industrial Environment Specific Regulations

Shoreline Residential: Industrial uses are permitted uses, except for over-the-water industrial uses, which are prohibited, unless as specified herein.

Urban Conservancy: Water-dependent and water-related industrial uses may be permitted as a conditional use; however, over the water industrial uses are prohibited, unless as specified herein.

7. INSTREAM STRUCTURES

Definition

Instream structures function for the impoundment, diversion, or use of water for hydroelectric generation and transmission (including both public and private facilities), flood control, irrigation, water supply (both domestic and industrial). Instream structures can also function for recreational or fisheries enhancement and for the discharge of effluent. Both the structures themselves and their support facilities are covered by this section. This applies to their construction, operation and maintenance, as well as the expansion of existing structures and facilities.

Instream Structure Policies

1. Location and Design Features

   - Applications for instream structures should clearly document the suitability of the proposed site for the specific type of development, including alternative locations. Such site suitability analysis should thoroughly consider the environmental effects of the proposed facilities at the primary site and at alternative sites.

   - All instream structures should be designed to permit natural transport of bed load materials.

- Instream structures and their support facilities should be designed to minimize removal of riparian vegetation and the necessity of massive shore defense structures.

- All nonwater-oriented facilities associated with instream structures, such as staging and storage areas, switching yards, utility transmission lines and in many cases power houses, should be located outside of shoreline jurisdiction.

- In determining the appropriateness of hydroelectric development, the recommendations and conclusions of the Northwest Power Planning Council (1988) or equivalent state-adopted site ranking study should be considered.

- Mitigation should be required for loss of fisheries and wildlife resources, natural systems including wetlands, and other sensitive areas. No net loss in critical area function, value, or acreage should occur as a result of instream structures and properly functioning conditions for proposed, threatened or endangered species shall be conserved. When required, mitigation measures should be properly planned and monitored to ensure their effectiveness.

- When possible, instream structures should be designed and constructed to insure public access to and along the shoreline, in accordance with the public access policies and regulations contained in this Master Program. Existing public access and recreational opportunities should be retained, enhanced, or replaced.

Instream Structures Regulations

1. Instream structures may be permitted as a conditional use.

2. All permit applications shall contain, at a minimum, the following:

    - A site suitability analysis that provides sufficient justification for the proposed site. The analysis must fully address alternative sites for the proposed development.

    - Proposed location and design of the instream structure, accessory structures, and access/service roads.

    - Provision for public access to and along the affected shoreline and proposed recreational features at the site, where applicable.

    - A plan that describes the extent and location of vegetation that is proposed to be removed to accommodate the proposed facility, and any site revegetation plan required by this Master Program.

    - A hydraulic analysis prepared by a licensed professional engineer which sufficiently describes the project's effects on floodway hydraulics, including potential increases in base-flood elevation, changes in stream

velocity, and the potential for re-direction of the normal flow of the affected river.

- Biological resource inventory and analysis that sufficiently describes the project's effects on fisheries and wildlife resources, prepared by a professional biologist.

- Provision for erosion control, protection of water quality, and preservation of fishery and wildlife resources during construction.

- Long-term management plans that described, in sufficient detail, provisions for protection of in-stream resources during construction and operation. The plan shall include means for monitoring its success.

3. Structural Development

   - Instream structures shall be designed, located, and constructed in such a manner as to avoid extensive topographical alteration.

   - Instream structures that divert water shall return flow to the stream in as short a distance as possible.

   - All instream structures shall be designed to permit the natural transport of bedload materials.

   - Powerhouses associated with hydroelectric facilities shall be located a minimum of fifty (50) feet from the floodway, provided that this does not apply to raceways.

Instream Structure Environment Specific Regulations

Shoreline Residential, Urban, and **Urban Conservancy**: Instream structures and associated developments may be permitted as a conditional use.

8. LANDFILL

Definition

Landfill is the creation of dry upland area by the filling or depositing of sand, soil, or gravel into a waterbody or wetland area.

Landfill Policies

1. Landfills waterward of the floodway should be discouraged and only allowed when necessary to facilitate water-dependent uses or water-enjoyment uses consistent with this Master Program for necessary river crossings and for projects beneficial to the environment.

2. The perimeter of landfills should be designed to avoid or eliminate erosion and sedimentation impacts, both during initial landfill activities and over time.

3. Where permitted, landfills should be the minimum necessary to provide for the proposed use and should be permitted only when tied to a specific development proposal that is permitted by the Master Program. Speculative landfill activity should be prohibited.

4. Mitigation for wetland impacts must be implemented pursuant to wetland policies and regulations contained in this shoreline master program and the City's critical area regulations.

Landfill Regulations

1. Applications for landfill permits shall include the following:

   a) Proposed use of the landfill area;

   b) Physical, chemical, and biological characteristics of the fill material;

   c) Source of landfill material.

   d) Method of placement and compaction;

   e) Location of landfill relative to natural and/or existing drainage patterns;

   f) Location of the landfill perimeter relative to the floodway;

   g) Perimeter erosion control or stabilization means;

   h) Type of surfacing and runoff control devices; and

   i) Location of wetlands or other sensitive areas.

2. Landfill waterward of the floodway shall be permitted as a conditional use only:

   a) In conjunction with a water-dependent use or a water-enjoyment use permitted under this Master Program.

   b) In conjunction with a bridge, utility, or navigational structure for which there is a demonstrated public need and where no feasible upland sites, design solutions, or routes exist.

   c) As part of an approved beach restoration project; or

   d) For fisheries, aquaculture, or wildlife habitat enhancement projects.

   e) Pier or pile supports shall be utilized in preference to landfills. Landfills for approved road development in floodways or wetlands shall be permitted only if pile or pier supports are proven structurally infeasible.

   f) Landfills shall only be permitted in conjunction with a specific development already permitted by this Master Program or

proposed simultaneously as part of a Conditional Use Permit application. Speculative landfills are prohibited.

3. Landfill shall be permitted only where it is demonstrated that the proposed action will not:

   - Result in significant damage to water quality, fish, and/or wildlife habitat.

   - Adversely alter natural drainage and current patterns or significantly reduce floodwater capacities.

4. Where landfills are permitted, the landfill shall be the minimum necessary to accommodate the proposed use.

5. Landfills shall be designed, constructed, and maintained to prevent, minimize, and control all material movement, erosion, and sedimentation from the affected area. Landfill perimeters shall be designed and constructed with silt curtains, vegetation, retaining walls, or other mechanisms to prevent material movement. In addition the sides of the landfill shall be appropriately sloped to prevent erosion and sedimentation, both during initial landfill activities and afterwards.

6. Fill materials shall be clean sand, gravel, soil, rock, or similar material. Use of polluted dredge spoils and sanitary landfill materials are prohibited. The developer shall provide evidence that the material has been obtained from a clean source prior to fill placement.

7. Landfills shall be designed to allow surface water penetration into aquifers, if such conditions existed prior to the fill.

Landfill Environment Specific Regulations

Shoreline Residential, Urban, and **Urban Conservancy**: By definition, landfill is the creation of "dry" upland area by depositing earth into a waterbody or wetland, therefore, these regulations do not apply to dry lands. Landfill within wetlands or the floodway may be permitted as a conditional use.

9. MINING

Definition

Mining is the removal and primary processing of naturally occurring materials from the earth for economic use. For purposes of this Master Program, "processing" includes screening, crushing, and stockpiling of materials removed from the site. Mining activities also include in-water dredging activities related to mineral extraction. Processing does not include general manufacturing, such as the manufacture of concrete.

Mining Policies

1. Only the mining of sand and gravel from river bars should be permitted, providing that appropriate permits are secured for the proposed activity and

the activity is consistent with all the City's critical area regulations (Sumner Municipal Code, Title 16) and protective of endangered, threatened, or sensitive species. All other mining activities should be encouraged to locate outside shoreline jurisdiction.

2. Mining should not be allowed in unique and fragile areas, and all areas where negative impacts to endangered, threatened, or sensitive species may occur.

3. Mining activities should allow the natural shoreline systems to function with a minimum of disruption during their operation and should return the site to as near natural a state as possible upon completion.

4. All impacts shall be mitigated, and where possible, shoreline enhancement should also be encouraged.

Mining Regulations

1. Mining operations landward of the floodway are prohibited.

2. Mining waterward of the floodway (Ordinary High Water Mark) is prohibited, except for scalping of river bars, which may be permitted as a conditional use, provided the proposed activity: secures all necessary permits; is consistent with the City's Critical Area regulations (Sumner Municipal Code, Title 16) and protective of endangered, threatened, or sensitive species; and that in any one year, the mining activity removes no more than one half of the material that is predictably replaced by deposition each year.

3. Excavation of sand, gravel, and other river materials by the open pit method is prohibited.

4. All mining impacts shall be mitigated, and where possible, shoreline enhancement shall be encouraged.

Mining Environment Specific Regulations

Urban Conservancy, Urban, and **Shoreline Residential**: Mining operations landward of the floodway are prohibited. Waterward of the ordinary high water mark, scalping of river bars may be permitted as a conditional use; all other forms of mining are prohibited.

10. PARKING

Definition

Parking is the use of land for the purpose of accommodating motor vehicles, motorized equipment, or accessory units, such as trailers. Land used for this purpose is leveled, cleared, and often covered with an impermeable surface.

Parking Policies

1. Parking in shoreline areas should be minimized.

2. Parking within shoreline jurisdiction should directly serve a permitted use on the property and should be sensitive to the adjacent shorelines and properties.

3. Parking facilities in shoreline areas should be located and designed to minimize adverse impacts including those related to stormwater runoff, water quality, visual qualities, public access, and vegetation and habitat maintenance.

4. Encourage the use of pervious materials in parking facilities.

5. Landscaping should consist of native vegetation in order to enhance the habitat opportunities within the shorelines area.

6. Discourage location of parking facilities in sensitive areas.

Parking Regulations

Parking for specific land use activities within the City of Sumner is subject to the requirements and standards set forth in the *Sumner Zoning Code*. In addition, the following parking requirements shall apply to all developments within shoreline jurisdiction.

1. Parking as a primary use shall be prohibited within the shoreline jurisdiction.

2. The location of parking areas in or near sensitive areas shall be avoided.

3. Parking or storage of recreational vehicles or travel trailers as a primary use shall be prohibited in all shoreline environment jurisdictions.

4. Parking in shoreline areas must directly serve an approved shoreline use.

5. Parking areas within shoreline jurisdiction shall be designed and landscaped to minimize adverse impacts upon adjacent shorelines and abutting properties. The landscaping shall preferably consist of native vegetation, to be planted within one (1) year after completion of construction and provide an effective screening three (3) years after planting. Adequate screening or landscaping for parking lots shall consist of one or more of the following:

    - A strip of land fifteen (15) feet wide landscaped with trees, shrubs, and groundcover.

    - A building or enclosed structure.

    - A strip of land not less than five (5) feet in width that is occupied by a continuous wall, fence, plant material, or combination of both; which shall be at least six (6) feet high at time of installation. The plant material shall be evergreen and spaced not more than three (3) feet on center if pyramidal in shape, or not more than five (5) feet if wider in branching habit. If the plant material is used in conjunction with a wall or fence meeting the minimum height requirements then said material may be of any kind and spacing.

The requirement for screening may be waived by the Director of Community Development, where screening would obstruct a significant view from public property or public roadway.

6. All landscaping shall be designed to provide biofiltration functions for runoff from the parking area.

7. Alternatives to conventional storm water treatment, such as use of pervious materials, shall be considered in order to minimize impacts due to runoff and the need for storm water treatment.

8. All landscaping must be maintained in a neat and orderly manner. In no event shall such landscape areas be used for the storage of materials or parking of automobiles, or recreational or other vehicles.

9. Parking facilities shall not be permitted over the water.

10. Parking shall be located on the landward side of the development unless parking is contained within a permitted structure.

11. Where there is no available land area on the landward side of the development, parking shall extend no closer to the shoreline than a permitted structure.

Parking - Environment Specific Regulations

Urban: Parking shall not be allowed within the 50-foot setback (as defined in *Chapter 4: Shoreline Environments*), and shall be a permitted use only when associated with a development that is consistent with the provisions of this Master Program.

Shoreline Residential: Parking shall not be allowed within the 100-foot setback (as defined in *Chapter 4: Shoreline Environments*), and shall be a permitted use only when associated with a development that is consistent with the provisions of this Master Program.

Urban Conservancy: Parking shall not be allowed within the 200-foot setback (as defined in *Chapter 4: Shoreline Environments*.

11. RECREATIONAL FACILITIES

Definition

Recreational development provides opportunities for the refreshment of body and mind through forms of play, sports, relaxation, amusement, or contemplation. It includes facilities for passive recreational activities, such as hiking, photography, viewing, and fishing. It also includes facilities for active or more intensive uses such as parks, campgrounds, and golf courses. This section applies to both publicly- and privately-owned shoreline facilities intended for use by the public or a private club, group, association, or individual.

Recreational Facilities Policies

1. The coordination of local, state, and federal recreation planning should be encouraged so as to mutually satisfy recreational needs. Shoreline recreational developments should be consistent with all adopted park, recreation, and open space plans.

2. Shoreline areas with a potential for providing recreation or public access opportunities should be identified for this use and acquired by lease or purchased and incorporated into the public park and open space system.

3. The linkage of shoreline parks, recreation areas, and public access points in a linear system, such as hiking paths, bicycle paths, and scenic drives should be encouraged.

4. Recreational developments should be located and designed to preserve, enhance, or create scenic views and vistas.

5. The use of jet-skis and similar recreational equipment should be restricted to special areas. This type of activity should be allowed only where no conflict exists with other uses and wildlife habitat.

6. All recreational developments should make adequate provisions for:

    - Vehicular and pedestrian access, both on-site and off-site.
    - Proper water, solid waste, and sewage disposal methods.
    - Security and fire protection for the use itself and for any use-related impacts to adjacent private property.
    - The prevention of overflow and trespass onto adjacent properties.
    - Buffering of such development from adjacent private property or natural area.

Recreational Facilities Regulations

1. Valuable shoreline resources and fragile or unique areas, such as wetlands and accretion shore forms, shall be used only for non-intensive and nonstructural recreation activities.

2. For recreation developments such as golf courses and playfields that require the use of fertilizers, pesticides, or other chemicals, the applicant shall submit plans demonstrating the methods to be used to prevent these chemical applications and resultant leachate from entering adjacent water bodies. Vegetation buffer strips and, if possible, shade trees shall be required between the river and recreation developments that use fertilizers, pesticides, or other chemicals. The Administrator shall determine the maximum width necessary for buffer strips. Buffers shall not be less than twenty-five (25) feet wide, measured on a horizontal plane, perpendicular to the floodway edge. The developer shall also be required to leave a chemical-free swath at least one hundred (100) feet in width next to water bodies and wetlands.

3. Recreational facilities shall make adequate provisions, such as screening, buffer strips, fences, and signs, to prevent overflow onto adjacent private properties.

4. No recreational buildings or structures shall be built over water, except water-dependent and/or water-enjoyment structures such as docks, bridges, and viewing platforms. Such uses may be permitted as a conditional use.

5. Proposals for recreational development shall include adequate facilities for water supply, sewage, and garbage disposal.

Recreational Facilities Environments

Shoreline Residential and **Urban**: Recreational facilities are a permitted use. Waterward of the ordinary high water mark, only water-dependent and/or passive, noncommercial water-enjoyment recreational facilities may be permitted as a conditional use

Urban Conservancy: Recreational facilities are permitted as a conditional use. Waterward of the ordinary high water mark, only water-dependent and/or passive, noncommercial water-enjoyment recreational facilities may be permitted as a conditional use

12. RESIDENTIAL DEVELOPMENT

Definition

Residential development refers to one or more buildings, structures, lots, parcels, or portions of parcels that are used or intended to be used to provide a place of abode for human beings. Residential development includes single family residences, duplexes, other detached dwellings, multifamily residences, apartments, townhouses, mobile home parks, other similar group housing, condominiums, subdivisions, planned unit developments, and short subdivisions. Residential development also includes accessory uses and structures such as garages, sheds, tennis courts, swimming pools, parking areas, fences, cabanas, saunas, and guest cottages. Residential development does not include hotels, motels, or any other type of overnight or transient housing or camping facilities.

> **Note:** A Substantial Development Permit is not required for construction of a single family residence by an owner, lessee, or contract purchaser for his own use or the use of his family. However, such construction and all normal appurtenant structures must otherwise conform to this Master Program. In addition, when applicable, all residential development is subject to the variance and conditional use requirements of this Master Program. For example, a variance will be required for any residential development that proposes to locate within the shoreline environment setbacks established in Chapter 4 of this Master Program.

Uses and facilities associated with residential development, which are identified as separate use activities in this program, such as clearing and grading and landfill are subject to the regulations established for those uses in this section. Clearing and grading may be exempted from the Shoreline Substantial Development Permit requirement, provided it is associated with an exempted single family residence and

the following conditions are met: the clearing and grading activity is confined to the construction site and grading does not exceed 250 cubic yards.

Residential Policies

1. In accordance with the Public Access requirements in Chapter 6, residential developments of three (3) or more dwelling units should provide dedicated and improved public access to the shoreline.

2. Residential development and accessory uses should be prohibited over the water.

3. New subdivision development should be encouraged to cluster dwelling units in order to preserve natural features, minimize physical impacts, and provide for public access to the shoreline.

4. In all new subdivisions and planned residential developments, joint use shoreline facilities should be encouraged including access stairs and docks.

5. Accessory development should be designed and located to blend into the site as much as possible. Accessory use and structures should be located landward of the principal residence.

6. Residential development should apply best management practices in developing surface and storm water facilities.

Residential Regulations

1. Residential development is prohibited waterward of the floodway.

2. Residential development shall not be approved if flood control or shoreline protection measures are necessary to create a residential lot or site area. Residential development shall be located and designed to avoid the need for structural shore defense and flood protection works in the foreseeable future.

3. If wetlands or other environmentally sensitive areas are located on the development site, clustering of residential units shall be required in order to avoid these areas.

4. Storm drainage and treatment facilities shall be required by the City for proposals five or more dwellings. Drainage facilities shall be separate from sewage disposal facilities. Drainage systems shall include provisions to prevent the direct entry of uncontrolled and untreated surface water runoff into receiving waters. Such provisions may include retention ponds, vegetated swales, and artificial wetlands.

5. Subdivisions and planned unit developments of five (5) or more waterfront lots/units shall dedicate, improve, and provide maintenance provisions for a pedestrian easement that provides area sufficient to ensure usable access to and along the shoreline for all residents of the development and the general public. When required, public access easements shall be a minimum of twenty-five (25) feet in width and shall comply with the public access

standards contained in this Master Program (see *Chapter 6, "Public Access"*).

Residential Environment Specific Regulations

Shoreline Residential and **Urban**: Residential development is a permitted use. Residential development waterward of the ordinary high water mark is prohibited.

Urban Conservancy: Residential development may be permitted as a conditional use provided a variance is obtained from the shoreline setback requirements (see *Chapter 4: Conservancy Environment*). Residential development waterward of the ordinary high water mark is prohibited.

13. SHORELINE MODIFICATION

Shoreline modification involves developments that provide riverbank stabilization or flood control. The purpose of such developments is to reduce adverse impacts caused by natural processes, such as current, flood, tides, wind, or wave action. Shoreline modification includes all structural and nonstructural means to reduce erosion of riverbanks and/or flooding.

Nonstructural methods include building setbacks, relocation of the structure to be protected, ground water management, planning and regulatory measures to avoid the need for structural stabilization

"Hard" structural stabilization measures refer to those with solid, hard surfaces, such as concrete bulkheads, while "soft" structural measures rely on softer materials, such as biotechnical vegetation measures or beach enhancement. Generally, the harder the construction measure, the greater the impact on shoreline processes, including sediment transport, geomorphology, and biological functions. Structural shoreline stabilization also often results in vegetation removal and damage to near-shore habitat and shoreline corridors. There is a range of measures varying from soft to hard that include:

- Vegetation enhancement;
- Upland drainage control;
- Biotechnical measures;
- Beach enhancement;
- Anchor trees;
- Gravel placement;
- Rock revetments;
- Gabions;
- Concrete groins;

- Retaining walls and bluff walls; and

- Bulkheads.

Note: As applied to shoreline stabilization measures, "normal repair" and "normal maintenance" include the patching, sealing, or refinishing of existing structures, the replenishment of sand or other material that has been washed away, and the replacement of less than twenty percent (20%) of the structure. Normal maintenance and normal repair are limited to those actions that are typically done on a periodic basis. Construction that causes significant ecological impacts is not considered normal maintenance and repair.

As applied to shoreline stabilization measures, "replacement" means the construction of a new structure to perform a shoreline stabilization function of an existing structure that can no longer adequately serve its purpose.

Additions to or increases in size of existing shoreline stabilization measures shall be considered new structures.

The following policies and regulations apply to all actions and developments that modify the shoreline for the purposes of preventing riverbank erosion or flooding. Following these general requirements, specific policies and regulations are provided for bulkheads, revetments, and dikes and levees.

Shoreline Modification Policies - General

1. Riprapping and other bank stabilization measures should be located, designed, and constructed primarily to prevent damage to existing development. All new development should be located and designed to prevent or minimize the need for shoreline stabilization measures and flood protection works. New development requiring shoreline stabilization should be discouraged.

2. Stabilization and protection works which are more natural in appearance, more compatible with ongoing shore processes, and more flexible for long term floodway management such as protective berms or vegetative stabilization should be encouraged over structural means such as concrete bulkheads or extensive revetments.

3. Structural solutions to reduce shoreline damage should be allowed only after it is demonstrated that nonstructural solutions would not be able to reduce the damage.

4. Use of car bodies, scrap building equipment, or appliances for shoreline stabilization should be prohibited.

5. Substantial river channel realignment should be discouraged as a means of shoreline stabilization and flood protection.

6. The design of bank stabilization or protection works should provide for the long term multiple use of shoreline resources and public access to public shorelines. In the design of publicly financed or subsidized works,

consideration should be given to providing pedestrian access to shorelines for low intensity outdoor recreation.

7. All flood protection measures should be placed landward of the natural floodway boundary, including wetlands that are directly interrelated and inter-dependent with the river.

8. If through construction and/or maintenance of shoreline modification developments, the loss of riparian vegetation and wildlife habitat occurs mitigation should be required.

Shoreline Modification Regulations - General

1. All new shoreline modification activity shall be located and designed to prevent or minimize the need for bank stabilization and flood protection works.

2. The City shall require and utilize the following information during its review of shoreline stabilization and flood protection proposals:

   - Purpose of the project;
   - Hydraulic characteristics of the river within one-half (0.5) mile on each side of the proposed project;
   - Existing shoreline stabilization and flood protection devices within one-half (0.5) mile on each side of the proposed project;
   - Biological characteristics of the area, including fish and wildlife resources;
   - Construction material and methods;
   - Physical, geological, and/or soil characteristics of the area;
   - Predicted impact upon area shore and hydraulic processes, adjacent properties, and shoreline and water uses; and
   - Alternative measures (including non-structural) that will achieve the same purpose.

3. Shoreline stabilization and flood protection measures shall not be designed and constructed in such a manner as to result in channelization of normal stream flows.

4. River and stream channel direction modification, and realignment are prohibited unless they are essential to uses that are consistent with this program.

5. New nonwater-dependent development, including single-family residences, that includes structural shoreline stabilization shall not be allowed unless all of the conditions below apply:

- The need to protect the development from destruction due to erosion caused by natural processes, such as tidal action, currents, and waves, is demonstrated through a geotechnical report.

- The erosion is not being caused by upland conditions, such as the loss of vegetation and drainage.

- Nonstructural measures, such as placing the development further from the shoreline, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient.

- The structure will not cause significant impacts to functions and values of critical areas or properly functioning conditions for proposed, threatened, and endangered species.

6. Flood control diking shall be landward of the floodway base (100-year frequency) and any wetlands directly interrelated and interdependent with the river.

7. Upon project completion, all disturbed shoreline areas shall be restored to as near pre-project configuration as possible and replanted with appropriate vegetation. All losses in riparian vegetation or wildlife habitat shall be mitigated at a ratio of 1:1.25 (habitat lost to habitat replaced).

8. Shoreline stabilization and flood protection works are prohibited in wetlands and on point and channel bars. They are also prohibited in salmon or trout spawning areas.

9. Shore modification shall to the extent possible, be planned, designed, and constructed to allow for channel migration. These developments shall not reduce the volume and storage capacity of rivers and adjacent wetlands or flood plains.

10. Use of car bodies, scrap building materials, asphalt from street work, or any discarded piles of equipment or appliances for the stabilization of shorelines shall be prohibited.

Shoreline Modifications

Permitted and conditional use requirements for bulkheads, revetments, and dikes and levees are specified under these headings below. All other forms of shoreline modification must be approved as a conditional use within all of the shoreline environments.

BULKHEADS

Bulkhead Definition

Bulkheads are walls usually constructed parallel to the shore whose primary purpose is to contain and prevent the loss of soil by erosion, wave, or current action. Bulkheads are used to protect riverbanks by retaining soil at the toe of the slope or by protecting the toe of the bank from erosion and undercutting.

Bulkheads are typically constructed of poured-in-place concrete, steel or aluminum sheet piling, wood, or wood and structural steel combinations.

Note: The Shoreline Management Act only exempts the construction of a normal protective bulkhead common to an existing single family residence from the Substantial Development Permit requirement. However, these structures are required to comply with all the policies, prohibitions, and development standards of this Master Program.

Bulkhead Policies

1. Defense works of natural materials, such as protective berms, beach enhancement, or vegetative stabilization are strongly preferred over structural defense works of materials such as steel, wood, or concrete. Proposals for bulkheads should demonstrate that natural methods are unworkable.

2. Bulkheads should be located, designed, and constructed primarily to prevent damage to existing development. New development that requires bulkheads should be discouraged.

3. Shoreline uses should be located in a manner so that bulkheading is not likely to become necessary in the future.

4. The cumulative effect of allowing bulkheads along river segments should be evaluated. If it is determined that the cumulative effect of bulkheads would have a deleterious effect on the shoreline, then exemptions and permits should not be granted.

5. Bulkheads should not be approved as a solution to geo-physical problems such as mass slope failure, sloughing, or landslides. Bulkheads should only be approved for the purposes of preventing bank erosion by the river.

Bulkhead Regulations

1. Bulkheads may be allowed only when evidence is presented which conclusively demonstrates that one of the following conditions exist:

    - Serious river erosion threatens an established use or existing building(s) on upland property.

    - Bulkheads are necessary to the operation and location of water-dependent, water-related, or water-enjoyment activities consistent with this Master Program; provided that all other alternative methods of shore protection have proven infeasible.

    - A bulkhead is necessary to retain a landfill that has been approved consistent with the provisions of this Master Program.

2. Proposals for bulkheads must first demonstrate that use of natural materials and processes and non-structural solutions to bank stabilization are unworkable.

3. The construction of a bulkhead for the primary purpose of retaining a landfill shall be allowed only in conjunction with:

   - A water-dependent use or a water enjoyment use;
   - A bridge or navigational structure for which there is a demonstrated public need and where no feasible upland sites, design solutions, or routes exist;
   - A wildlife or fishing enhancement project.

4. Bulkheads shall not be located on shorelines where valuable geo-hydraulic or biological processes are sensitive to interference. Examples of such areas include wetlands and accretion landforms.

5. Bulkheads are to be permitted only where local physical conditions, such as foundation bearing materials, and surface and subsurface drainage, are suitable for such alterations.

6. If possible, bulkheads shall be located landward of the floodway and generally parallel to the natural shoreline. In addition:

   - Where no other bulkheads are adjacent, the construction of a bulkhead shall be as close to the eroding bank as possible and in no case shall it be more than three (3) feet from the toe of the bank.
   - A bulkhead for a permitted landfill shall be located at the toe of the fill.
   - Where permitted a bulkhead must tie in flush with existing bulkheads on adjoining properties, except where the adjoining bulkheads extend waterward of the floodway, the requirements set forth in this section shall apply.

7. Replacement bulkheads may be located immediately in front of the bulkhead to be replaced such that the two (2) bulkheads will share a common surface, except where the existing bulkhead has not been backfilled or has been abandoned and is in serious disrepair. In such cases, the replacement bulkhead must be located according the requirements set forth in this section.

8. Bulkheads shall be sited and designed consistent with appropriate engineering principles. Professional geologic site studies or design may be required for any proposed bulkhead if the Administrator determines sufficient uncertainties exist.

9. When a bulkhead is required at a public access site, provision for safe access to the water shall be incorporated into bulkhead design.

10. Bulkheads shall be designed for the minimum dimensions necessary to adequately protect the development.

11. Stairs or other permitted structures may be built into a bulkhead but shall not extend waterward of it.

12. Bulkheads shall be designed to permit the passage of surface or groundwater without causing ponding or saturation of retained soil/materials.

13. Adequate toe protection consisting of proper footings, a fines retention mesh, etc., shall be provided to ensure bulkhead stability without relying on additional riprap.

14. Materials used in bulkhead construction shall meet the following standards:

    - Bulkheads shall utilize stable, nonerodable, homogeneous materials such as concrete, wood, and rock that are consistent with the preservation and protection of the ecological habitat.

    - Shore materials shall not be used for fill behind bulkheads, except clean dredge spoil from a permitted off-site dredge and fill operation.

Bulkhead Environment Specific Regulations

Shoreline Residential and **Urban**: Bulkheads are a permitted use. Bulkheads located waterward of the ordinary high water mark are prohibited, except minor encroachments on the floodway for permitted bulkheads, and where bulkheads are required for the purpose of retaining a permitted landfill.

Urban Conservancy: Bulkheads are permitted as a conditional use. Bulkheads located waterward of the ordinary high water mark are prohibited, except minor encroachments on the floodway for permitted bulkheads, and where bulkheads are required for the purpose of retaining a permitted landfill.

Dikes And Levees

Dikes and Levees Definition

Dikes and levees are manmade earthen embankments for the purpose of flood control.

> **Note**: Dikes and levees existing on September 8, 1975, which were created, developed, or utilized primarily as an agricultural drainage or diking system may be operated and maintained without obtaining a Shoreline Substantial Development Permit. Maintenance does not include expanding the length or width of the dike or levee. However, reconstruction to the original built height may be allowed, if settling has occurred.

Dikes and Levees Policies

1. Dikes and levees should be located, designed, constructed, and maintained so that the resultant effects on the river processes will not cause significant damage to adjacent properties or valuable resources.

2. Proposals for dikes and levees should be designed to protect life and property without impacting upstream or downstream uses of the floodway or river resources.

3. Decisions regarding dikes and levees should balance the benefits of development with potential flood losses and destruction of natural and beneficial floodplain values. Floodplain values include water resource values (moderation of floods, water quality maintenance, and groundwater recharge), living resource values (fish, wildlife, and plant resources and habitat), cultural resource values (open space, natural beauty, scientific study, outdoor education, and recreation) and cultivated resource values (agriculture, aquaculture, and forestry).

Dikes and Levees Regulations

1. Dikes and levees shall be limited in size to the minimum height required to protect adjacent lands from the projected flood stage, as identified in the Sumner Flood Damage Prevention Code, Chapter 15.52.

2. Dikes and levees shall not be placed in the floodway, except as current deflectors necessary for protection of bridges and roads.

3. Public access to the shoreline shall be provided. Improved trail systems along diked or leveed shorelines are preferred.

4. Proposals for dikes and levees shall contain a detailed evaluation of potential losses to floodplain values. This evaluation shall address:

    - Groundwater discharge
    - Associated wetlands
    - Water quality
    - Erosion/sedimentation.

5. Dikes and levees shall only be authorized by conditional use permit and shall be consistent with all flood control management plans and regulations adopted by the City of Sumner.

Dikes and Levees Environment Specific Regulation

Shoreline Residential, Urban, and **Urban Conservancy**: Dikes and levees may be permitted as a conditional use. Dikes and levees waterward and landward of the ordinary high water mark are prohibited except where minor encroachment on the floodway may be permitted for permitted dikes and levees, or as current deflectors necessary for protection of bridges and roads. Dikes and levees proposed waterward of the ordinary high water mark may be permitted as a conditional use.

REVETMENTS

Revetment Definition

A revetment is a sloped shoreline structure built to protect an existing eroding shoreline or newly placed fill against river currents. Revetments are most commonly built of randomly placed boulders (riprap) but may also be built of sand cement bags, paving, or building blocks, gabions (rock filled wire baskets) or other systems and materials.

The principal features of a revetment, regardless of type is a heavy armor layer, a filter layer, and toe protection.

Revetment Policies

1. The use of armored structural revetments should be limited to situations where it is determined that nonstructural solutions such as bioengineering, setbacks, buffers or any combination thereof, will not provide sufficient shoreline stabilization.

2. Revetments should be designed, improved, and maintained to provide public access whenever possible.

Revetment Regulation

1. The Shoreline Administrator shall require professional design of a proposed revetment, if it is determined that uncertainties exist, such as:

    - Inadequate data on local geophysical conditions;

    - Inadequate data on stream flow, velocity, and/or flood capacity; and

    - Effects on adjacent properties.

2. Bank revetments, where permitted shall be placed at the extreme edge of the riverbank.

3. Design of public works shall include and provide improved access to public shorelines whenever possible.

4. When permitted, the siting and design of revetments shall be performed using appropriate engineering principals, including guidelines of the U.S. Soil Conservation Service and the U.S. Army Corps of Engineers.

5. If an armored revetment is employed the following design criteria shall be met:

    - The size and quantity of the material shall be limited to only that necessary to withstand the estimated energy intensity of the hydraulic system;

    - Filter cloth must be used to aid drainage and help prevent settling;

    - The toe reinforcement or protection must be adequate to prevent a collapse of the system from river scouring or wave action; and

    - Fish habitat components, such as large boulders, logs, and stumps shall be considered in the design subject to Hydraulic Project Approval by the Washington Department of Fisheries.

Revetment Environment Specific Regulation

Shoreline Residential and **Urban**: Revetments landward of the ordinary high water mark are a permitted use; provided that, waterward of the ordinary high water mark only minor encroachments on the floodway may be permitted in the following cases: in support of revetments proposed landward of the ordinary high water mark, or as current deflectors necessary for protection of bridges and roads. Revetments proposed waterward of the ordinary high water mark may be permitted as a conditional use.

Urban Conservancy: Revetments may be permitted as a conditional use.

14. SIGNS

Definition

A public display whose purpose is to provide information, direction, or advertising.

Sign Policy

Signs should be designed and placed so that they are compatible with the natural quality of the shoreline environment and adjacent land and water uses.

Sign Regulation

Signs within the City of Sumner are subject to the requirements and standards specified in the Sumner sign regulations (Sumner Municipal Code, Title 18.44). In addition, the following sign requirements shall apply to signs within shoreline jurisdiction.

1. Over-water signs or signs on floats or pilings shall be related to water-dependent uses only.

2. When feasible, signs shall be flush mounted against existing buildings. Freestanding, on-premise signs must demonstrate that it is unfeasible to mount the sign on an exterior wall of the permitted development. Failure to satisfactorily comply with this requirement shall be sufficient grounds for denial of the application.

3. Where freestanding on-premise signs are approved, the sign shall not exceed six (6) feet in height.

4. Temporary or obsolete signs shall be removed within ten (10) days of elections, closures of business, or termination of any other function. Examples of temporary signs include real estate signs, directions to events, political advertisements, event or holiday signs, construction signs.

5. Signs that do not met the policies and regulations of this Master Program shall be considered nonconforming signs and regulated per SMC 18.44.

6. Permanent signs shall be constructed of durable, weather-resistant materials.

7. All public and private enterprises, development, and services located in shoreline areas shall have no more than two (2) on-premise advertising devices or signs.

8. On-premise signs shall not extend beyond the exterior wall of the building to which the sign is attached.

9. The following types of signs are permitted in all upland shoreline environments (e.g., excluding all areas waterward of the ordinary high water mark in the shoreline environment):

    - Water navigational signs, highway and railroad signs necessary for operation, safety, and direction.
    - Public information signs directly relating to an allowed local shoreline activity.
    - Off-premise, free standing signs for community identification, information, or directional purposes.
    - Signs with "changing messages," as long as the information is limited to time-temperature-date or public messages.
    - National, site, and institutional flags for temporary decorations customary for special holidays and similar events of a public nature.
    - Temporary directional signs to public or quasi-public events, provided these signs are removed within ten (10) days following the event.
    - Signs identifying developments approved in compliance with the provisions of this Master Program.

10. Billboards and other off-premises signs shall be regulated per SMC 18.44.

11. The following types of signs are prohibited in all shoreline environments:

    - No signs that impair visual access from public viewpoints in view corridors shall be permitted.
    - Spinners, streamers, pennants, flashing lights, and other animated signs used for commercial purposes. Highway and railroad signs are exceptions.
    - Signs placed on trees or other natural features.
    - Roof mounted signs.

Signs Environment Specific Regulations

Signs shall comply with the specific shoreline environment requirements set forth in Chapter 4 and shall be permitted only in association with a development that is consistent with the provisions of this Master Program.

15. TRANSPORTATION

Definition

Transportation facilities are those structures and developments that aid in land and water surface movement of people, goods, and services. They include roads and highways, bridges and causeways, bikeways, trails, railroad facilities, and boat and floatplane terminals.

Transportation Policies

1. New roads and railroads within shoreline jurisdiction should be minimized.

2. Roads and railroad locations should be planned to fit the topographical characteristics of the shoreline such that minimum alternation of natural conditions result. The number of river crossings should be minimized to the maximum extent possible.

3. Trail and bicycle systems should be encouraged along the Stuck and Puyallup Rivers to the maximum extent feasible.

4. When existing transportation corridors are abandoned they should be reused for water-dependent use or public access.

5. Joint use of transportation corridors within shoreline jurisdiction for roads, utilities, and motorized forms of transportation should be encouraged.

Transportation Regulations

1. Transportation facilities and services shall utilize existing transportation corridors wherever possible, provided the shoreline is not adversely impacted and the development is otherwise consistent with this Master Program.

2. Transportation and primary utility facilities shall be required to make joint use of rights-of-way and to consolidate river crossings.

3. Landfills for transportation facility development are prohibited in water bodies and wetlands and on accretion beaches, except when all structural and upland alternatives have proven infeasible and the transportation facilities are necessary to support uses consistent with this program.

4. Major new highways, freeways, and railways shall be located outside shoreline jurisdiction, except where a river crossing is required. These roads shall cross shoreline areas and rivers by the shortest, most direct route, unless this route would cause more damage to the environment.

5. New transportation facilities shall be located and designed to minimize or prevent the need for shoreline modification.

6. All bridges must be built high enough to allow the passage of debris and provide three (3) feet of clearance above the 100-year flood plain.

7. Shoreline transportation facilities shall be sited and designed to avoid steep or unstable areas and fit the existing topography in order to minimize cuts and fills.

8. Cut and fill slopes shall be designed at the normal angle of repose or less.

9. Cut and fill and sidecast slopes shall be protected from erosion by mulching, seeding, compacting, riprapping, benching, or other suitable means.

10. Bridge abutments and necessary approach fills shall be located landward of wetlands or the floodway, except bridge piers may be permitted in a water body as a conditional use.

Transportation Environment Specific Regulation

Shoreline Residential and **Urban**: Transportation development is a permitted use, provided that transportation development located waterward of the ordinary high water mark may be permitted as a conditional use.

Urban Conservancy: Transportation development may be permitted as a conditional use.

16. UTILITIES

Definition

Utilities are services and facilities that produce, transmit, carry, store, process, or dispose of electric power, oil, gas, water, sewage, communications, and the like.

Utility Policies

1. Utilities should utilize existing transportation and utility sites, rights-of-way and corridors, whenever possible. Joint use of rights-of-way and corridors should be encouraged.

2. Unless no other feasible alternative exists, utilities should be prohibited in wetlands and other critical areas.

3. New utility facilities should be located so as not to require extensive shoreline protection works.

4. Whenever possible, utilities should be placed underground or alongside or under bridges.

5. Solid waste disposal activities and facilities should be prohibited in shoreline areas.

Utility Regulations

1. Applications for the installation of utility facilities shall include the following:

    - Description of the proposed facilities;

- Reasons why the utility facility requires a shoreline location.
- Alternative locations considered and reasons for their elimination.
- Location of other utility facilities in the vicinity of the proposed project and any plans to include the other types of utilities in the project.
- Plans for reclamation of areas disturbed both during construction and following decommissioning and/or completion of the useful life of the utility.
- Plans for control of erosion and turbidity during construction and operation; and
- Identification of any possibility for locating the proposed facility at another existing utility facility site or within an existing utility right-of-way.

2. Utility development shall, through coordination with local government agencies, provide for compatible, multiple use of sites and rights-of-way.

3. Utility development shall include public access to the shoreline, trail systems, and other forms of recreation, providing such uses will not unduly interfere with utility operations, endanger the public health, safety, and welfare, or create a significant and disproportionate liability for the owner.

4. Proposals for new utility corridors or river crossings shall fully substantiate the infeasibility of existing routes.

5. Existing solid waste disposal and transfer facilities within shoreline jurisdiction shall be expeditiously phased out and rehabilitated.

6. The following utility facilities, which are not essentially water-dependent, may be permitted as a conditional use if it can be shown that no reasonable alternative exists.
   - Water system treatment plants;
   - Sewage system line, interceptors, pump stations, and treatment plants;
   - Electrical energy generating plants (except for instream structures), substations, lines, and cables.
   - Petroleum and gas pipelines.

7. New solid waste disposal sites and facilities are prohibited.

8. New utility lines including electricity, communications, and fuel lines shall be located underground, except where the presence of bedrock or other obstructions make such placement infeasible. Existing above ground lines shall be moved underground during normal replacement processes.

9. Transmission and distribution facilities shall cross areas of shoreline jurisdiction by the shortest most direct route feasible, unless such route would cause significant environmental damage.

10. Utility facilities requiring withdrawal of water from streams or rivers shall be located only where minimum flows as established by the Washington State Department of Fish and Wildlife can be maintained.

11. Utility developments shall be located and designated so as to avoid the use of any structural or artificial shore modification works.

12. Water lines shall be completely buried under the riverbed in all river crossings except where such lines may be affixed to a bridge structure and except for appropriate water or sewage treatment plant intake pipes or outfalls.

13. All underwater pipelines transporting liquids intrinsically harmful to aquatic life or potentially injurious to water quality are prohibited, unless no other alternative exists. In those instances where no other alternative exists, the use may be permitted as a conditional use. However, automatic shut-off valves shall be provided on both sides of the water body.

14. Construction of utilities underwater or in adjacent wetlands shall be timed to avoid fish and wildlife migratory and spawning periods.

Utility Environment Specific Regulations

Shoreline Residential and **Urban**: Landward of the ordinary high water mark, utilities may be permitted. Waterward of the ordinary high water mark, utilities may be permitted as a conditional use, provided it can be demonstrated that no other reasonable alternative location exists.

Urban Conservancy: Utilities may be permitted as a conditional use, provided it can be demonstrated that no other reasonable alternative location exists.